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THOMTE, MAZOUR & NIEBERGALL, L.L.C.
2120 S. 72ND STREET, SUITE 1111
OMAHA, NE 68124

EXAMINER

SINGH, RAMNANDAN P

ART UNIT PAPER NUMBER

2614

DATE MAILED: 08/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/809,736

Applicant(s)

HAYES ET AL.

Examiner

Ramnandan Singh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because Fig.4 does not provide legends required to explain the figure..

Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:

The specification states: "the ability to detect the return of SIT tones" on page 7, line 1. Write the full word for the acronym, "SIT".

Appropriate correction is required.

Claim Objections

3. Claims 8-9 and 25-26 are objected to because of the following informalities:

Claim 8 recites "processor to identify **SIT** tones " in line 2. The use of the acronym "**SIT**" in the claim is improper. Write the full word for "SIT". A similar thing holds for claims 9, 25 and 26.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Dans [US 6,195,417 B1].

Regarding claim 1, Dans teaches a system (10) for automatically classifying a list of telephone numbers into one or more categories (i.e. banks) shown in Fig. 1 [col. 4, line 58 to col. 5, line 5], the system comprising:

a processor (i.e. scheduler 28) [col. 5, lines 36-52] ;

a data storage medium (26) for at least temporarily storing the list of telephone numbers on a line within the telephone network [col. 5, lines 29-35]; and

the software operative of the processor to:

a) initiate calls to telephone numbers from the list of telephone numbers on a line within the telephone network [col. 5, line 60 to col. 6, line 4; Fig. 2];

b) receive and identify audible sounds (or messages) on the line [col. 6, line 21 to col. 8, line 46; Fig. 2]; and

c) assign one or more of the categories (i.e. banks) to each of the telephone numbers according to the audible sounds [col. 8, line 47 to col. 9, line 33; col. 11, line 37 to col. 13, line 29; Figs. 1-6].

Regarding claim 2, Dans further teaches the system, wherein the software is further operative on the processor to create a data file (i.e. state machine 40) comprising the telephone numbers and the identity of the category (i.e. bank) assigned to each of the telephone numbers [Fig. 1; col. 5, line 60 to col. 6, line 32; col. 10, line 47 to col. 11, line 35].

Regarding claim 3, Dans further teaches the system, wherein the software is operative on the processor to generate reports based on the data file (i.e. state machine 40) [col. 11, lines 16-35].

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4-7, 10-24, 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dans as applied to claim 1 above, and further in view of Suhm et al [US 6,823,054 B1].

Regarding claim 4, although Dans teaches using a software package (i.e. a computer program) including a speech recognition system, called VISUAL VOICE, which is responsible for actions requested by the state machine (40) col. 8, lines 17-46]; he does not disclose the details for voice dialog between the processor and a callee. So one of

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ordinary skill in the art would have been motivated to seek any embodiment that discloses details of analyzing the automated response of the state machine, such as Suhm et al.

Suhm et al teach a system for analyzing an interactive voice response (IVR) software of a processor to determine a complete sequence of events occurring within the IVR system, wherein the IVR system is operable to automatically accept calls from callers and respond to input from callees on the line, enabling the processor to play an audible message over the line that requests a specific response from a callee on the line [Fig. 3D; col. 9, lines 58-67; col. 14, lines 21-45; col. 15, lines 49-57; col. 16, lines 12-43].

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Suhm et al with Dans in order to enable the program to run interactively in response to the caller's spoken words [Suhm et al; col. 14, lines 43-45].

Regarding claim 5, Suhm et al teach the system having a call termination mode of the contact that responds to an automation message [Fig. 5; col. 14, lines 31-42; col. 18, line 64 to col. 19, line 9; col. 19, line 62 to col. 20, line 13].

Regarding claims 6-7, Suhm et al teach the system, wherein the software is further operative to the processor to classify the telephone numbers as live answered or not live-answered [col. 5, line 64 to col. 6, line 8; col. 9, lines 58-67; col. 10, line 63 to col. 11, line 25; col. 18, line 64 to col. 19, line 9].

1 Regarding claim 10, Dans further teaches the system, as shown in Fig. 6, wherein
the software (i.e. scheduler) is further operative on the processor to initiate calls to the not
live-answered telephone numbers on a line within the telephone network and receive
audible sounds on the line [Fig. 6; col. 13, lines 31-58; col. 14, lines 15-38].

5 Regarding claim 11, Dans further teaches the system, wherein the software is
further operative on the processor to compare the audible sounds to one or more known
audible sounds to sub-classify the not live-answered telephone numbers [col. 19, lines 47-
50].

to Regarding claim 12, Dans further teaches the system, wherein the known audible
sounds are comprised of at least portions of spoken messages [col. 19, lines 41-46].

15 Regarding claim 13, Dans further teaches the system, wherein the spoken
messages are comprised of separate messages advising that a telephone number is
disconnected, has been changed, or is privacy blocked [Fig. 6; col. 14, lines 38-67].

20 Regarding claim 14, Dans further teaches the system, wherein the spoken
messages are comprised of separate messages advising that all circuits are busy or that
an area code has changed [col. 14, lines 54-62; col. 15, lines 15-17].

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Regarding claim 15, Suhm et al further teach the system , wherein the spoken messages are comprised of common corporate and answering system greetings [col. 31, lines 48-62; col. 35, lines 26-38].

Regarding claim 16, Dans further teaches the system , wherein the software is further operative on the processor to identify and classify a telephone number from which audible sounds are received that are not similar to the one or more known audible sounds [col. 14, lines 15-37].

Regarding claim 17, Dans further teaches the system, wherein the software is further operative on the processor to create a data file comprising the not answered telephone numbers and a sub-classification for each of the not live-answered telephone numbers based on the one or more known audible sounds [col. 15, line 50 to col. 16, line 3].

Regarding claim 18, Dans further teaches the system , wherein the software is further operative on the processor to generate reports based on the data file [col. 16, lines 4-14].

Regarding claim 19, Dans further teaches the system wherein said software is further operative on said processor to at least temporarily store said audible sounds received over said line on said data storage medium prior to identifying said audible sounds [Fig. 6; col. 13, lines 51-58].

Regarding claim 20, Dans further teaches the system wherein said software is further operative on said processor to complete said call after receiving and storing said audible sounds but prior to identifying said audible sounds [col. 14, lines 15-23].

Regarding claim 21, Suhm et al further teaches the system, wherein said software is further operative on said processor to play an audible message over said line that requests a specific response from a callee on said line [Fig. 3D; col. 9, lines 58-67; col. 14, lines 21-45; col. 15, lines 49-57; col. 16, lines 12-43].

Regarding claim 22, Suhm et al further teaches the system, wherein said audible message requests that a callee on said line terminate said call [Fig. 5; col. 14, lines 31-42; col. 18, line 64 to col. 19, line 9; col. 19, line 62 to col. 20, line 13].

Regarding claims 23-24, Suhm et al teach the system, wherein the software is further operative to the processor to classify the telephone numbers as live answered or not live-answered [col. 5, line 64 to col. 6, line 8; col. 9, lines 58-67; col. 10, line 63 to col. 11, line 25; col. 18, line 64 to col. 19, line 9].

Regarding claim 27, Dans further teaches the system, wherein the software is further operative on the processor to compare the audible sounds to one or more known audible sounds to sub-classify the not live-answered telephone numbers [col. 19, lines 47-50].

Regarding claim 28, Dans further teaches the system, wherein the known audible sounds are comprised of at least portions of spoken messages [col. 19, lines 41-46].

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8. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dans as applied to claim 1 above, and further in view of Brown et al [US 20030086541 A1].

Regarding claim 8, Dans does not teach expressly the system wherein the software is further operative on the processor to identify standard information tones (SIT) on line after initiating the calls.

20 Brown et al teach a tone detector (203) to detect SIT tones on line after initiating the calls [Figs. 3C, 5; Para: 0035].

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Brown et al with Dans in order to classify audio samples based on the identification of tones [Brown et al; Para: 0035].

Regarding claim 9, Brown et al further teach classifying the telephone numbers as not live-answered (i.e. recorded voice) when the Sit is identified [Para: 0002].

9. Claims 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Dans and Suhm et al as applied to claim 19 above, and further in view of Brown et al [US 20030086541 A1].

Regarding claim 25, Dans does not teach expressly the system wherein the software is further operative on the processor to identify standard information tones (SIT) on line after initiating the calls.

Brown et al teach a tone detector (203) to detect SIT tones on line after initiating the calls [Figs. 3C, 5; Para: 0035].

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Brown et al with Dans in order to classify audio samples based on the identification of tones [Brown et al; Para: 0035].

Regarding claim 26, Brown et al further teach classifying the telephone numbers as not live-answered (i.e. recorded voice) when the Sit is identified [Para: 0002].

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Zhang et al [US 6,993,119 B1] teach using an enunciation module(44) in conjunction with automatic speech recognition (46) and DTMF decoder (42) [Fig. 2; col. 6, lines 27-62; Abstract].

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramnandan Singh whose telephone number is (571) 272-7529. The examiner can normally be reached on M-TH (8:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (571) 272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ramnandan Singh
Examiner
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A handwritten signature in black ink, appearing to be 'RNS' with a large, sweeping flourish underneath.